



IBM eServer iSeries

The next generation iSeries...
...simplicity in an on demand world

Agenda

Announcement Highlights

e-business on demand™

The Customer Challenge: Solving the Cost³ Equation

Summary

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Announcement Highlights

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The Customer Challenge: Solving the Cost³ Equation

Summary

iSeries 2003 Announcement Highlights

iSeries	<ul style="list-style-type: none">▪ An on demand operating environment for e-business
New servers	<ul style="list-style-type: none">▪ New iSeries servers deliver up to 80% price performance<ul style="list-style-type: none">– New Small to Medium Enterprise servers: i810 and iSeries 800▪ New POWER4-based servers for medium to large enterprises<ul style="list-style-type: none">– i825, i870, i890 (feature On/Off Capacity on Demand)▪ New high performance PCI-X I/O
New packaging	<ul style="list-style-type: none">▪ Dramatically simplified product choice with Standard and Enterprise Editions<ul style="list-style-type: none">– Unrestricted interactive 5250 CPW with Enterprise Edition▪ Designed for the exploitation of multiple e-business workloads▪ Enhanced integration with WebSphere[®], Lotus[®], Linux[™] & Windows[™]▪ Simplified software pricing tiers
New capabilities	<ul style="list-style-type: none">▪ On/Off Capacity on Demand▪ WebSphere Application Server - Express for iSeries▪ WebFaced applications run without interactive 5250 CPW

e-business on demand

Announcement Highlights

e-business on demand

The Customer Challenge: Solving the Cost³ Equation

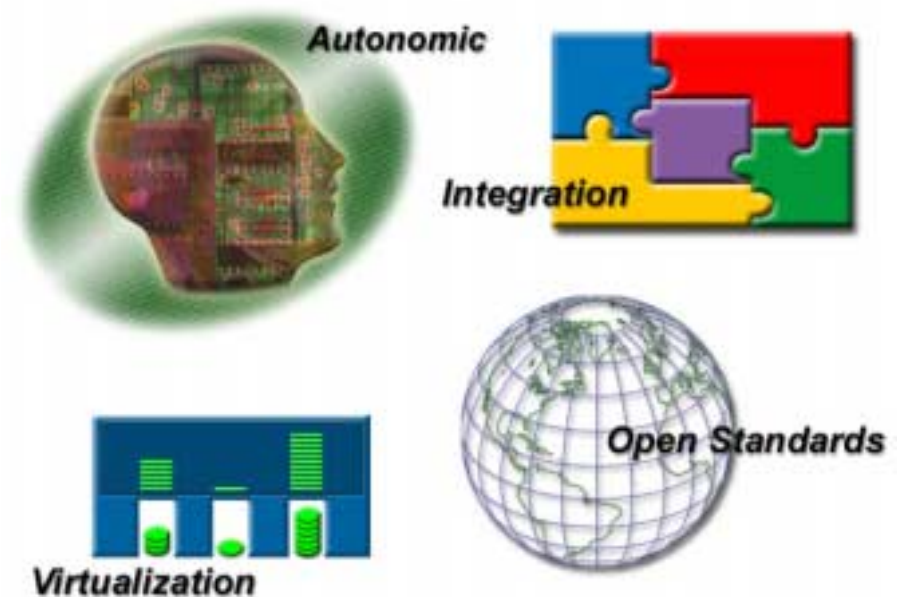
Summary

The next generation iSeries...

... simplicity in an on demand world

- e-business adoption
 - Access
 - Enterprise integration
 - On demand
- on demand businesses
 - Responsive in real-time
 - Require variable cost structures
 - Focused on core competencies
 - Resilient to challenges

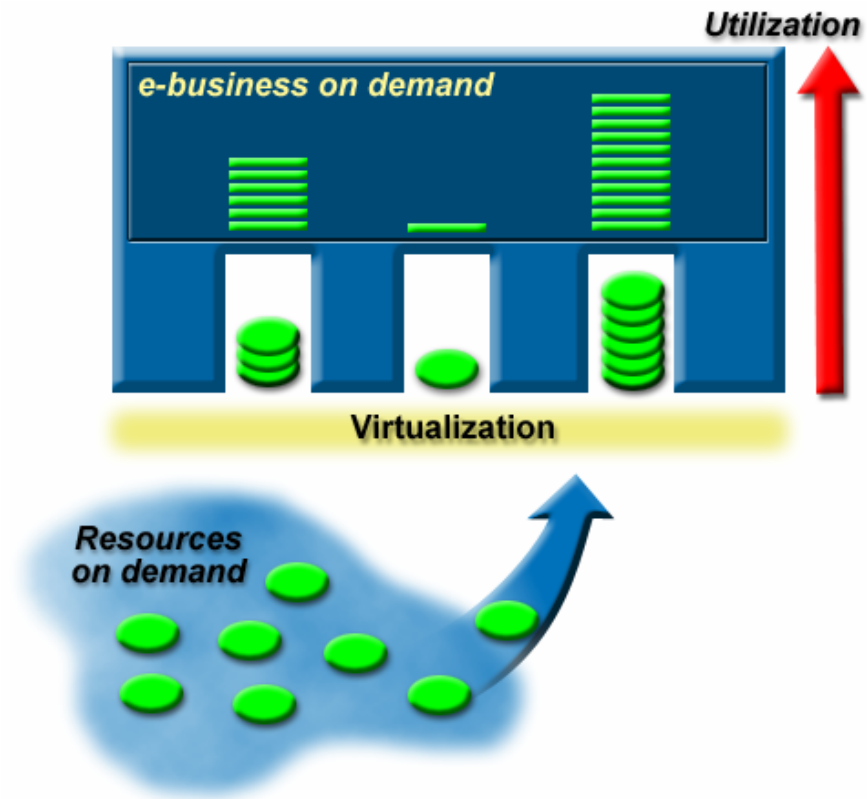
on demand Operating Environment



Integration



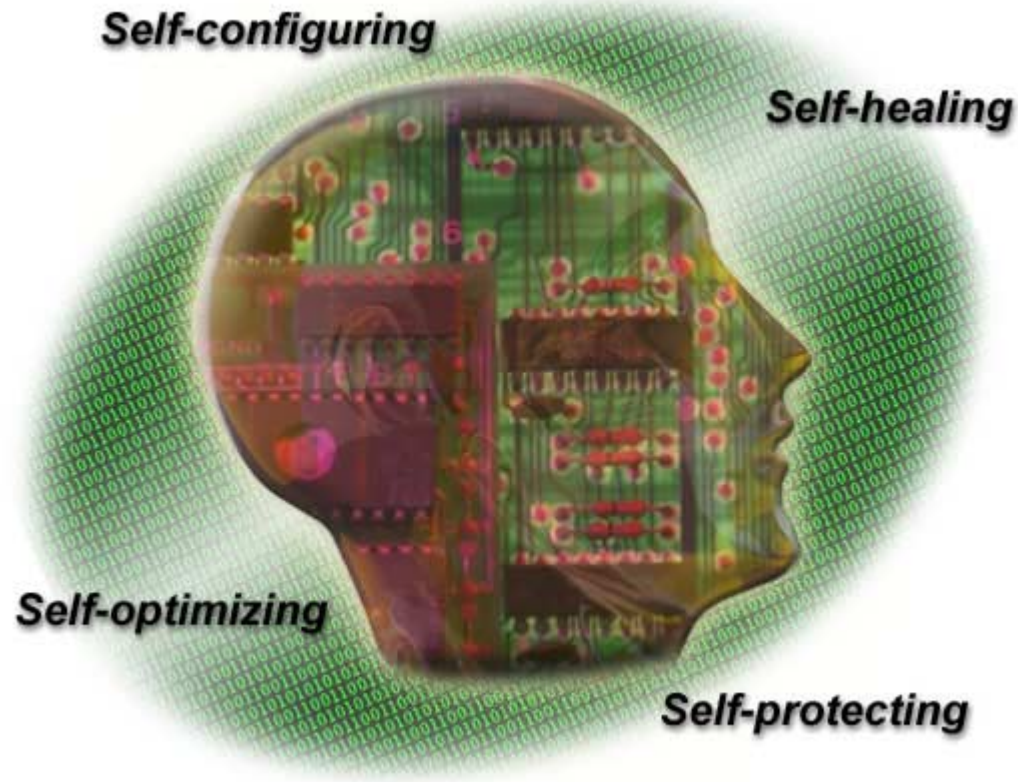
Virtualization



Open Standards



Autonomic Computing



iSeries on demand computing environment

Announcement Highlights

e-business on demand

❖ **The Customer Challenge: Solving the Cost³ Equation**

Summary

The Customer Challenge: Solving the Cost³ Equation

1) Cost of Acquisition ...

Upfront server, operating system and middleware price



*... New Servers,
New Packaging*

IBM eServer iSeries - At a Glance

- Over 90% of customers see significant price / performance improvements!
- Significantly simplified packaging
- Simplified software tiers

Servers for Medium to Large Enterprises

i825 *i870* *i890*

New! **New!** **Enhanced!**

Servers for Small to Medium Enterprises

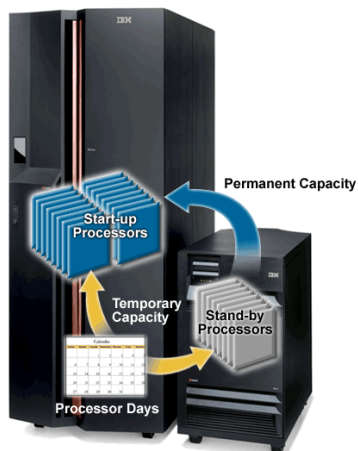
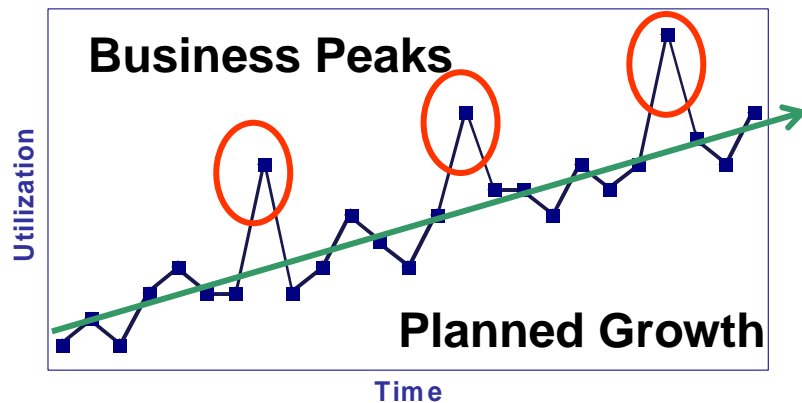
iSeries 800 *i810*

New! **New!**

IBM eServer iSeries – New, Simplified Product Line



Capacity on Demand



- Adjust to unpredictable demand without interrupting operations or applications
- Affordable processor activation price simplifies upgrade procurement
- Activate a processor for Linux without paying for OS/400
- CUoD (for permanent capacity)
 - Planned growth, Pay when purchased
- On/Off Capacity on Demand
 - Business peaks (temporary capacity)
 - Pay either before or after activation
 - 14 bonus processor days

On demand – The Right Level for Your Business¹

- **Enterprise Edition**

Includes maximum on demand capabilities

- **Standard Edition**

Aggressively priced for e-business workloads

Multiple operating environments
Web modernization (WebFacing)

Capacity on demand
Dynamic LPAR
OS/400 and DB2 licenses

Multiple operating environments
Web modernization (WebFacing)

Capacity on demand
Dynamic LPAR
OS/400 and DB2 licenses

License for popular e-business & datacenter management software

Maximum interactive 5250 CPW

Processor activation for Linux
Integrated xSeries Server

Education and Services to accelerate deployment of WebSphere, Linux and Windows



Note: ¹ Edition contents vary by model. Example shown here is for i870 or i890

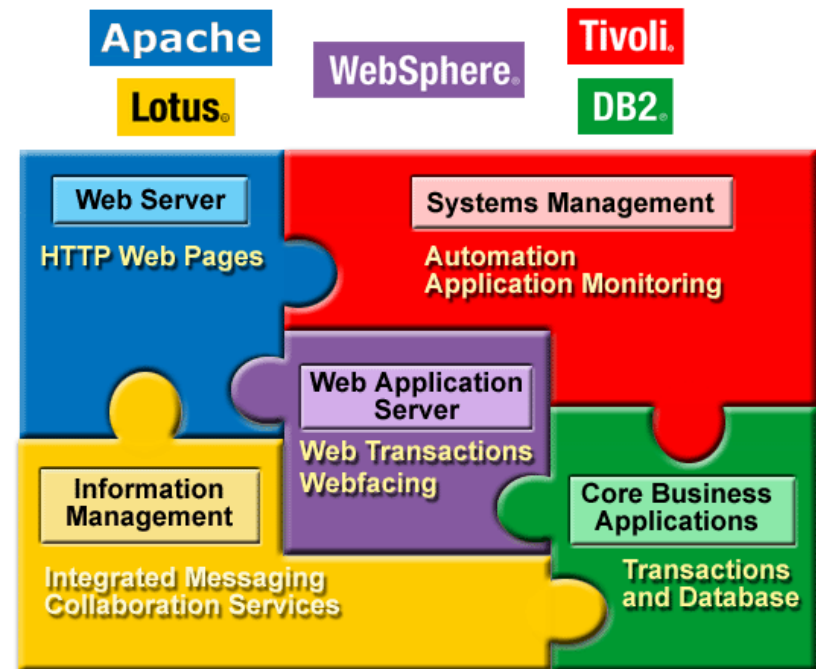
Enterprise Edition Software Value (i825, i870, i890)

■ IBM e-business software

Choice of WebSphere Application Server
 Lotus Sametime
 QuickPlace
 DB2 Query Mgr and SQL Toolkit
 DB2 SMP
 DataPropagator for iSeries
 DB2 Extenders -- XML and Text

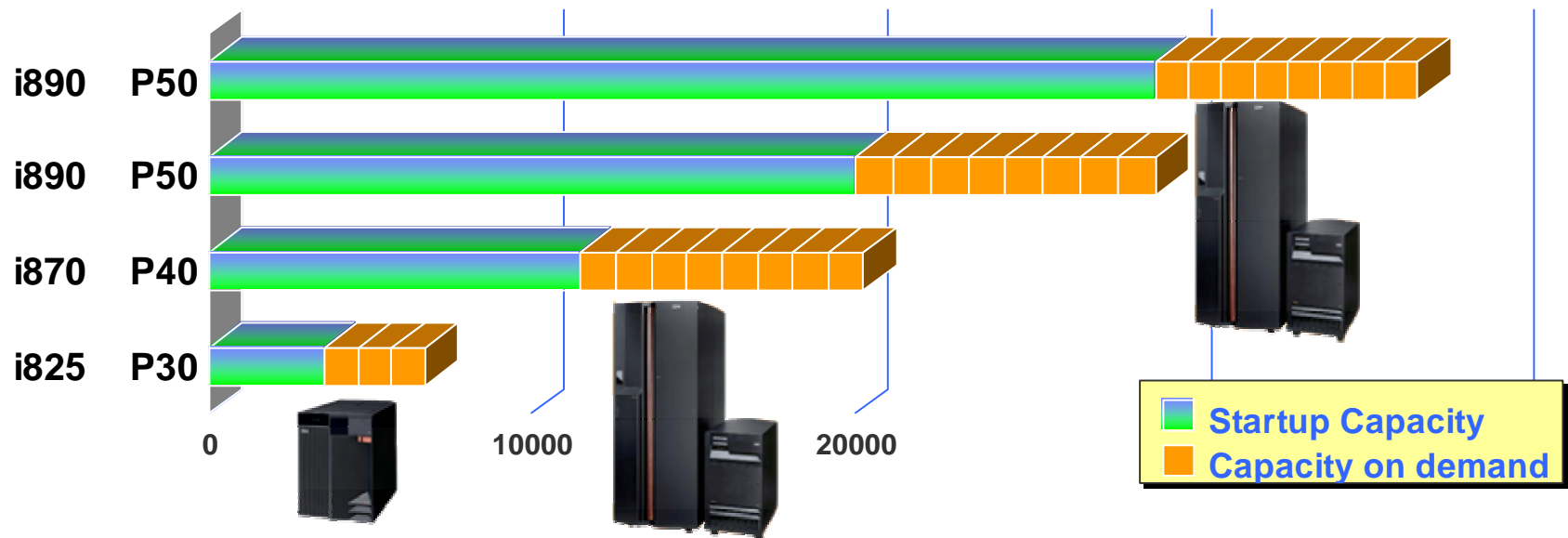
■ IBM Datacenter Management Tools

Performance Tools
 HA Cluster Resources
 Media and Storage Extensions
 Backup Recovery and Media Services
 Tivoli Monitoring -- PAC for Web
 Tivoli Storage Manager Extended Edition



Notes: Licensing includes one server license for software charged by software tiers, or one license for each startup processor for software charged by processor.

iSeries Servers for Medium to Large Enterprises

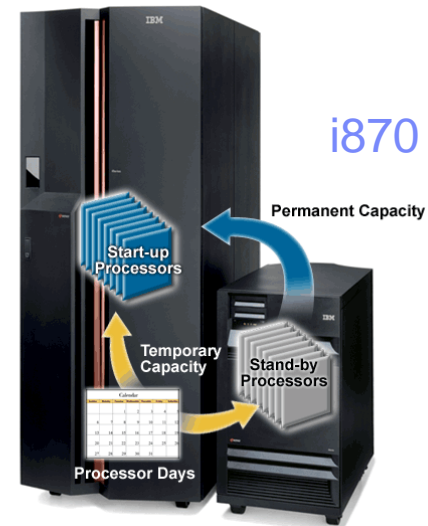
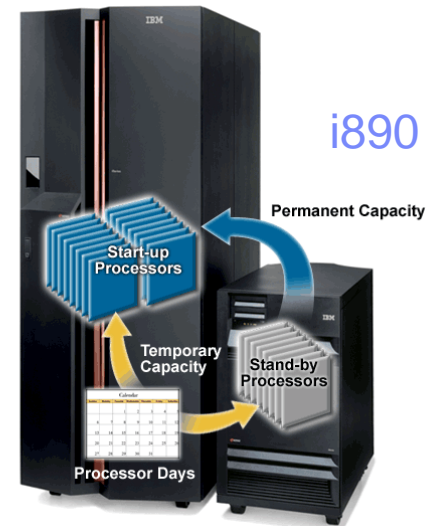


- On/Off Capacity on Demand
- Standard and Enterprise Editions
- OS/400 priced per processor, flexibility to activate processors for Linux
- Single software tier, regardless of the edition or processor activation

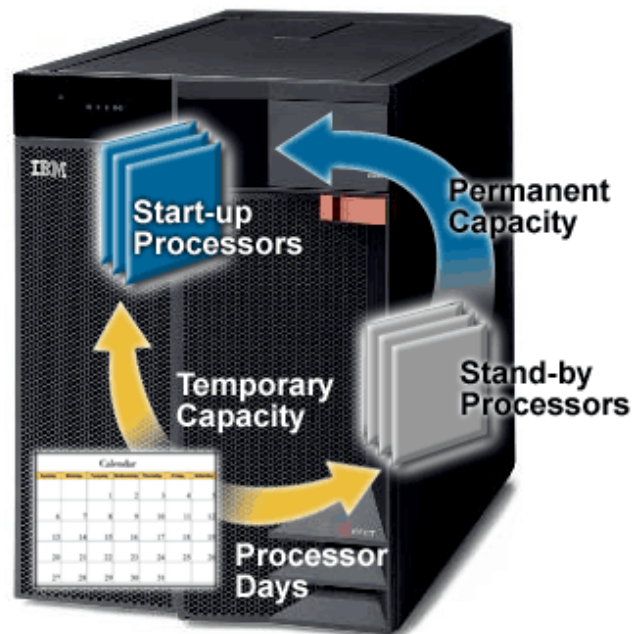
i890 and i870

- Deliver mainframe-class performance with unmatched iSeries growth for large enterprises
- Capacity on demand
- Up to 32 dynamic logical partitions

i890	Standard	Enterprise
24-32 way Up to 37,400 CPW	P50	P50
16-24 way Up to 29,300 CPW	P50	P50
i870	Standard	Enterprise
8-16 way Up to 20,000 CPW	P40	P40



i825

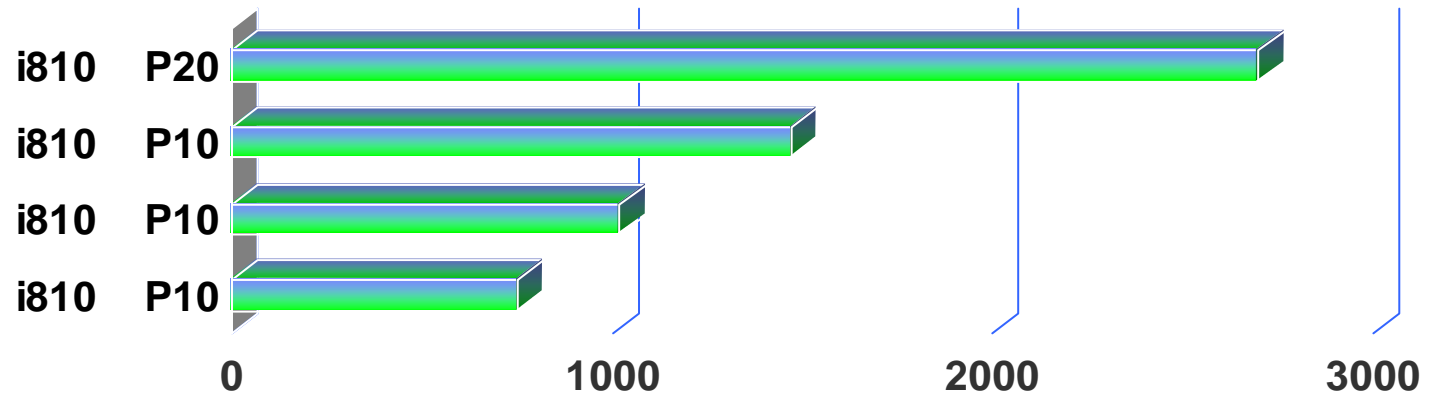


- Delivers exceptional flexibility and growth for mid-sized enterprises
- Capacity on demand
- Up to 32 dynamic logical partitions

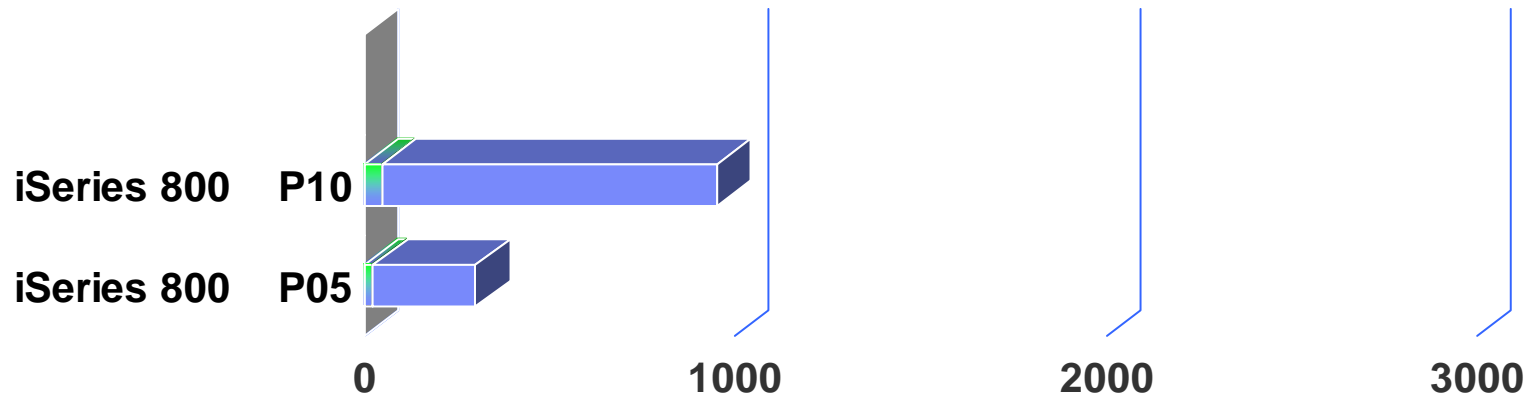
i825	Standard	Enterprise
3-6 way Up to 6,600 CPW	P30	P30

iSeries - Servers for Small to Medium Enterprises

i810 Offers Standard and Enterprise Editions



iSeries 800 Offers Editions with fixed amounts of 5250 CPW



i810



- Built for small to medium enterprises running a broad range of e-business including 5250 OLTP solutions
- Deliver up to 80% price performance improvements
- Exceptional I/O expandability with up to 14 TB disk
- Ideal for Windows and Linux server consolidation

i810	Standard	Enterprise
2,700 CPW	P20	P20
1,450 CPW	P10	P10
1,020 CPW	P10	P10
7500 CPW	P10	P10

iSeries 800



- Built for the needs of small to medium enterprises with e-business including 5250 OLTP applications
- Advanced Edition
 - Robust server configuration & WebSphere – Express
- Standard Edition
 - Robust server configuration & WebSphere – Express
- Value Edition
 - Base server configuration

iSeries 800 Editions

Advanced	950/50	P10
Standard	300/25	P05
Value	300/25	P05

iSeries for Domino™

- Ideal for Domino server consolidation
- Extend Domino with additional Lotus software, WebSphere, Linux applications, and DB2 integration, all on a single server footprint
- Highly flexible performance management

Lotus® software



iSeries for Domino	MCU*
i825 6-way	17,400
i825 4-way	11,600
i810 2-way	7,900
i810 1-way	4,200
i810 1-way	3,100

Note: * Mail and Calendar Users. Pre-GA estimates, for final numbers see performance capabilities reference guide

High Performance Direct Attach Storage Options

Achieve up to 3X throughput improvements with enhanced PCI-X I/O options

Improve performance with IBM's 3 disk optimized RAID-5

New 35GB and 70GB 15K RPM disk drives

New PCI-X I/O towers with rack mount options



New PCI-X Ultra RAID Disk Controllers

	Write-Cache (Max)	Min / Max drives per RAID set
High performance - 2757	757 MB	3 / 18
Low cost alternative for SME servers - 2782	40 MB	3 / 12

BEFORE

i890	0	120	240	560	1050	2000	4550	10000	16500	20200	37400
24-32 way	P50	P50	P60	P60	P60	P60	P60	P60	P60	P60	P60
16-24 way	P50	P50	P60	P60	P60	P60	P60	P60	P60	P60	
i840	0	120	240	560	1050	2000	4550	10000	16500	20200	
18-24 way	P40	P40	P50	P50	P50	P50	P50	P50	P50	P50	
12-18 way		P40	P50	P50	P50	P50	P50	P50	P50		
8-12 way	P40	P40	P50	P50	P50	P50	P50	P50			
i830	0	70	120	240	560	1050	2000	4550			
18-24 way	P30	P30	P40	P40	P40	P40	P40	P40			
i820	0	35	70	120	240	560	1050	2000			
3700	P30	P30	P40	P40	P40	P40	P40	P40			
2350	P20	P20	P30	P30	P30	P30	P30				
1100	P20	P20	P30	P30	P30						
670		P10	P20	P20	P20						
370		P10	P20	P20	P20						
i270	0	30	50	70							
2350	P20			P20							
1070	P10		P10								
465		P10									

- Multiple processor features
- Complex interactive features
- Interactive upgrade forced higher software tier
- No CUoD on base processors

AFTER

i890	Standard	Enterprise
24-32 way	P50	P50
16-24 way	P50	P50
i870	Standard	Enterprise
8-16 way	P40	P40
i825	Standard	Enterprise
3-6 way	P30	P30
i810	Standard	Enterprise
2700	P20	P20
1450	P10	P10
1020	P10	P10
750	P10	P10
iSeries 800		
950/50	P10	
300/25	P05	

- Up to 80% price / performance improvements!
- Single software tier, choice of Standard or Enterprise Edition
- On/Off Capacity on Demand for all i825, i870 & i890
- WebFaced applications without interactive
- Enterprise Edition features maximum on demand capabilities
 - Integrated IBM software value
 - Unrestricted interactive

AFTER Eliminating Interactive Features

i820	35	70	120	240	560	1050	2000
3700	\$240K	\$268K	\$320K	\$395K	\$555K	\$770K	\$1065K
2350	\$155K	\$183K	\$235K	\$310K	\$470K	\$685K	
1100	\$77K	\$105K	\$157K	\$232K	\$392K		
600	\$41K	\$69K	\$121K	\$196K			
370	\$23K	\$51K	\$103K	\$178K			

- ✓ One price
- ✓ One software tier
- ✓ Maximum on demand capabilities

i810	Enterprise
2700	\$230 K
1450	\$120 K
1020	\$78 K
750	\$55 K

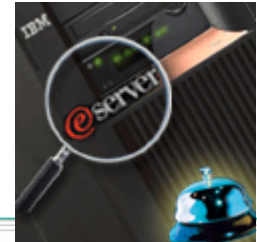
← CEC prices

iSeries 800	
950/50	\$38K
300/25	\$9.9K / \$19K

← Package prices

Software Maintenance

- Provide users timely access to proven solutions
- Improve IT productivity and deployment effectiveness
- Single, cost effective offering combining software upgrade entitlement and remote technical support
 - Access current and future releases
 - Voice and electronic support
 - Defect and routine use assistance
- One year contract sold with new iSeries servers or new sales



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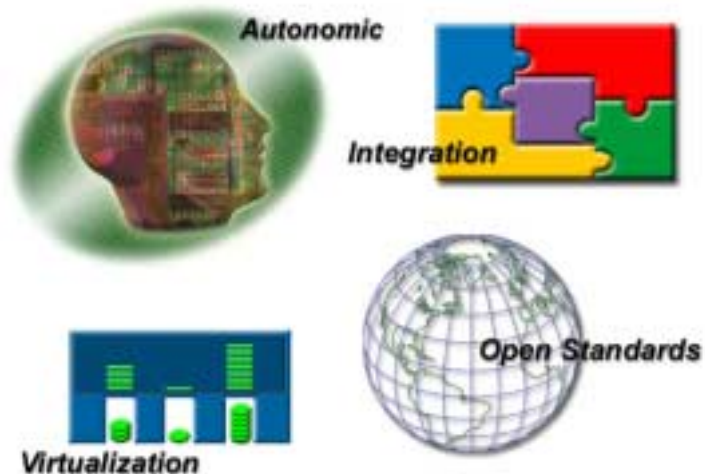
By name [Products A-Z](#)

By category

The Customer Challenge: Solving the Cost³ Equation

2) Cost of Ongoing Operations ...

Ongoing cost of skills to deploy and manage solutions



... iSeries' on demand operating environment

Server Consolidation = Managing Operating Costs



*“My job is to deliver babies and not manage server farms.
We overcame this challenge by consolidating
everything on iSeries.”*

Professor Hwan-wook, Chung (M.D, PhD)
CIO, Samsung Cheil Medical Center, South Korea

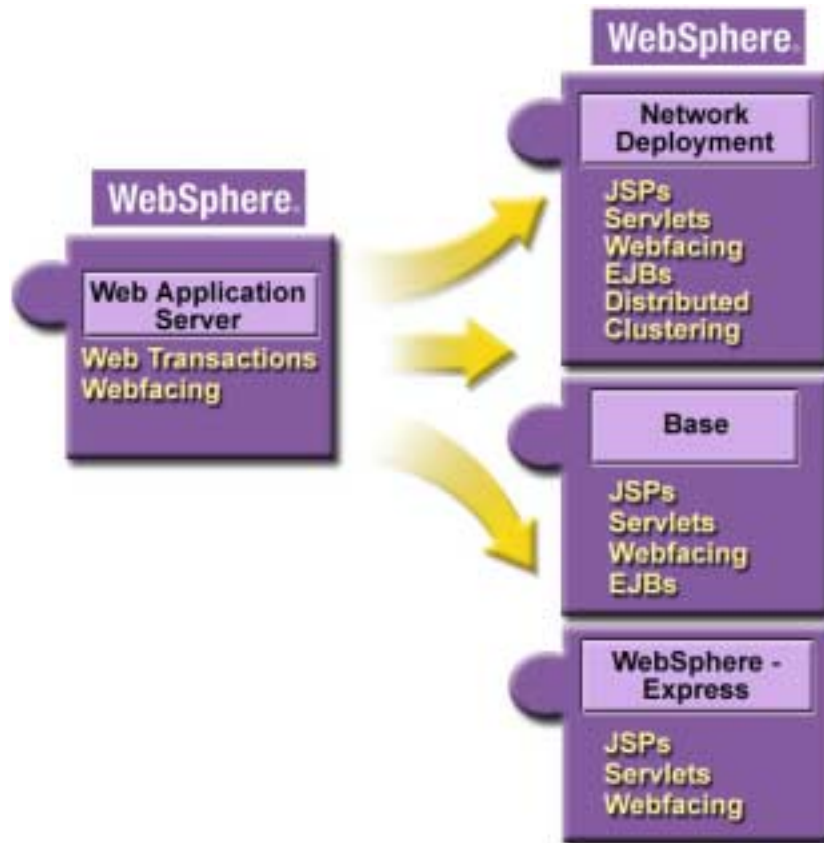
The Customer Challenge: Solving the Cost³ Equation

2) Cost of Ongoing Operations ...

Ongoing cost of skills to deploy and manage solutions



WebSphere Application Server V5



- Flexible choice of Web application server, packaged for range of customer sizes
- Network Deployment
Advanced clustering, distributed security, directory and systems management
- Base
Premier application server
Integrating enterprise data and dynamic e-business transactions
- Express
Development environment
Simple, dynamic Web sites

WebSphere - Express for iSeries



- Cost effective deployment & management of world-class dynamic Web sites and applications
- Self-configuring install Wizard, exclusive for iSeries
 - Sets up WebSphere & IBM HTTP Server (powered by Apache)
- Includes WebSphere Development Studio Client for iSeries and Telephone Directory
- Ideal to run Webfaced applications

Republic Indemnity Company of America

“I just installed WebSphere – Express for iSeries. It was incredibly easy. The install wizard built a WebSphere server which came up fully integrated with the Apache-based HTTP Server on the first try! This thing is an administrator's dream come true. Its ease of use from a systems management and administration standpoint can't be beat.”

Bob Cancilla, Republic Indemnity Company of America

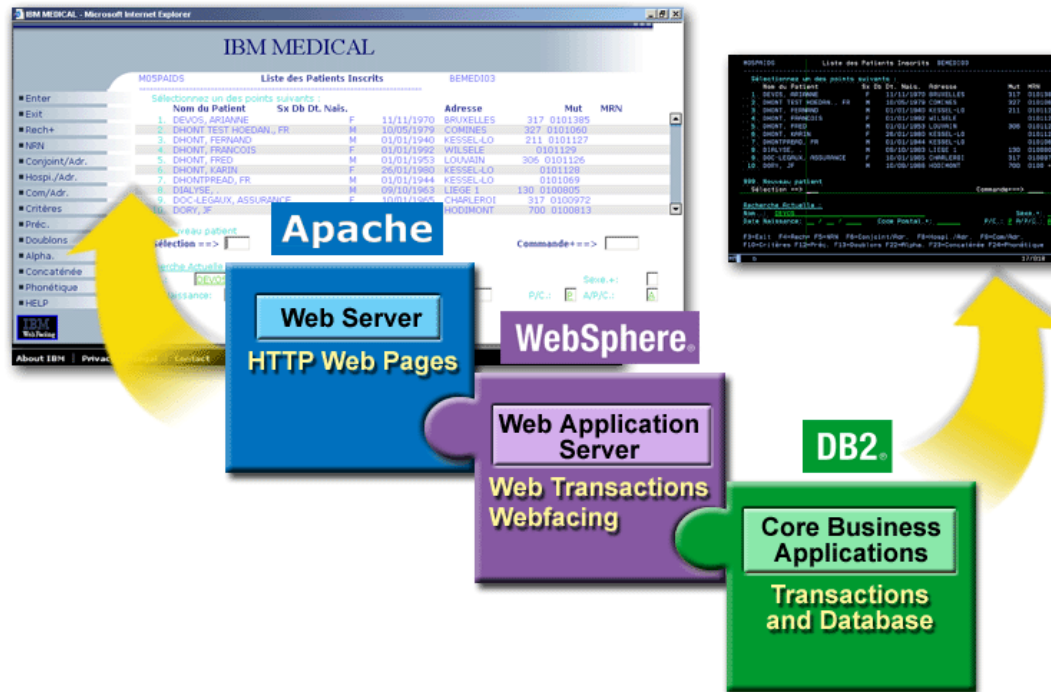
**Republic
Indemnity**

www.republicindemnity.com

DB2 Data Management Software

WebSphere software

WebFacing & WebSphere Development Studio Client



- One stop shopping for iSeries developers, includes Web and Java tools
- IBM WebFacing Tool enhanced and runs on WebSphere – Express for iSeries
- WebFaced applications run without interactive 5250 CPW on new models

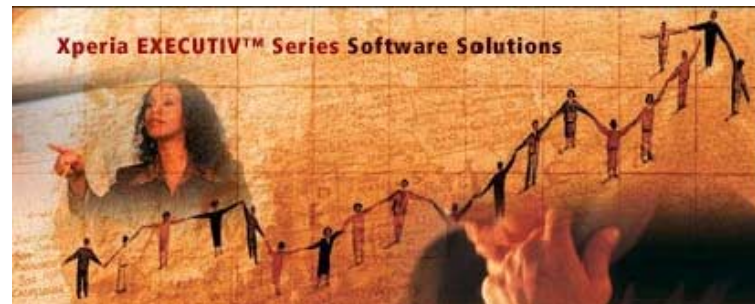
Xperia Solutions, USA

“We knew the value proposition of WebFacing was extremely attractive, but we were absolutely blown away by how easy and quick it was to create Web interfaces for our 5250 applications. IBM has a winner!”

Dave Bauer – Architect, Xperia Solutions



WebSphere® software



www.xperiasolutions.com

WebSphere Commerce



- Robust and integrated framework for enterprise-class B2B and B2C e-commerce sites
- Pro Entry
 - Priced for SMEs, single store
- Professional Edition
 - Order & inventory management
 - Business campaign management
 - Integrated business intelligence
 - Live help (via Sametime®)
 - Auctions
 - Payment management
- Business Edition
 - Additional B2B capability

Bodegas y Bebidas

“Direct sales doubled in the year the site has been active. WebSphere software has brought us closer to our customers, improved our Web site’s visibility and our company’s availability.”

José Ángel Serna Gómez– IT Manager, Bodegas y Bebidas



www.byb.es.com



DB2 Data Management Software

WebSphere software

Lotus software

Brenntag, Inc.

“Our goal was to provide customers with realtime, up-to-date data and have orders go directly into the system and automatically trigger other processes. Given this requirement, WebSphere was far and away the superior option for us.”

Todd Stewart – MIS Director, Brenntag Inc.



www.brenntaginc.com



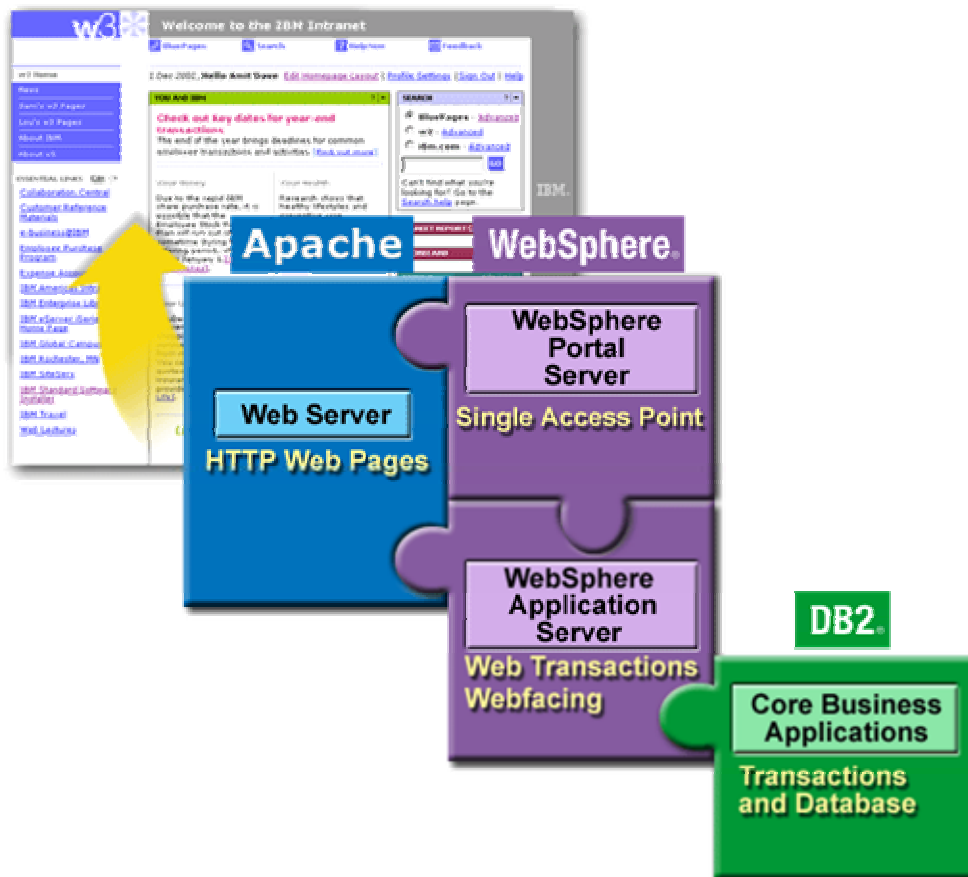
DB2 Data Management Software

WebSphere software

Lotus software

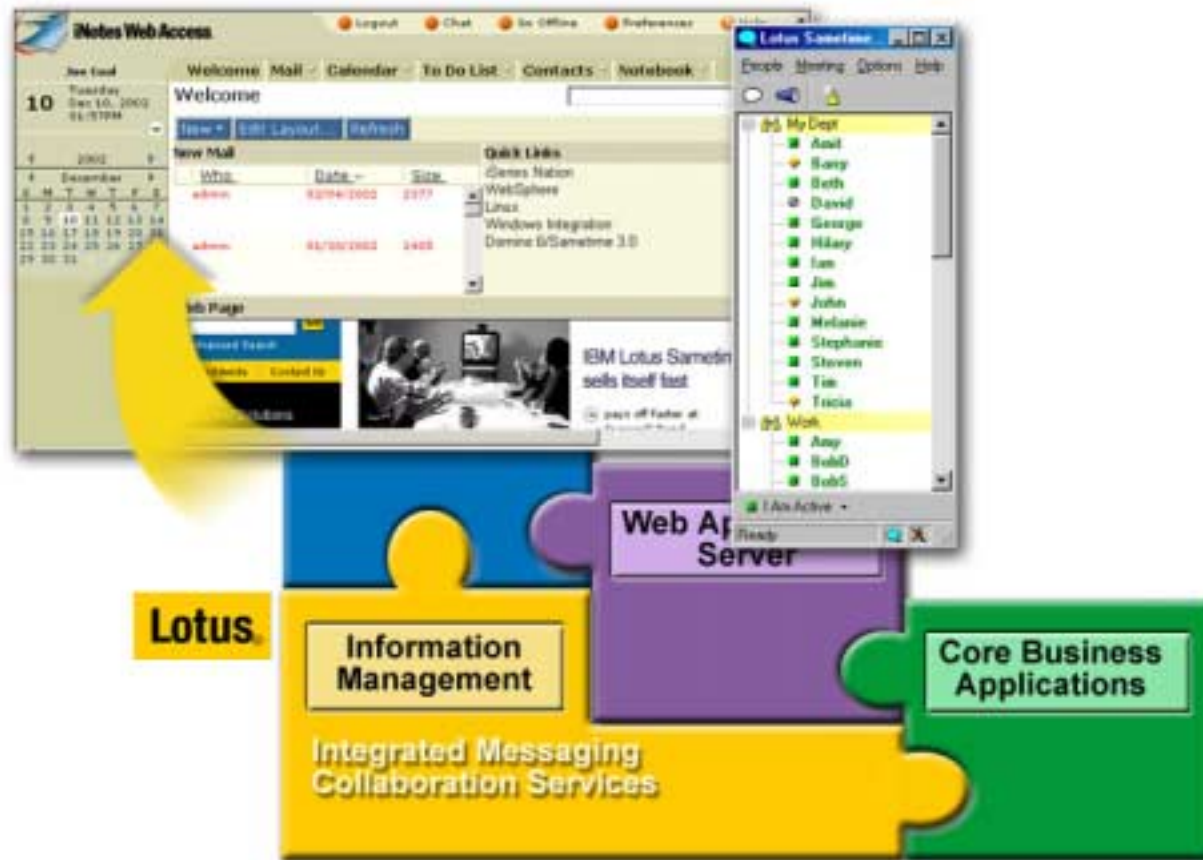
Tivoli software

WebSphere Portal Server



- Improve productivity using WebSphere to provide a single access point to dynamic information, applications, people
- B2E, B2B and B2C portals
- Connectivity and integration
- Presentation and administration
- WebSphere Portal Server Enable 4.1
Includes WebSphere Application Server 4.x

Lotus Notes & Domino 6 and iNotes Web Access



- Empower companies to create dynamic workplaces
- New capabilities of Lotus Notes® & Domino 6 deliver breakthrough performance, scalability and productivity
- iNotes™ Web Access delivers an intuitive browser-based interface to users throughout an organization

Apria Healthcare

“Apria currently has about 2500 Sametime users on our iSeries. We're extremely pleased with the increased productivity our employees get by using Sametime. And we find that our iSeries provides the same stability and performance for our Sametime implementation that it does for Lotus Domino.”

George Suda – VP, Information Systems, Apria Healthcare.



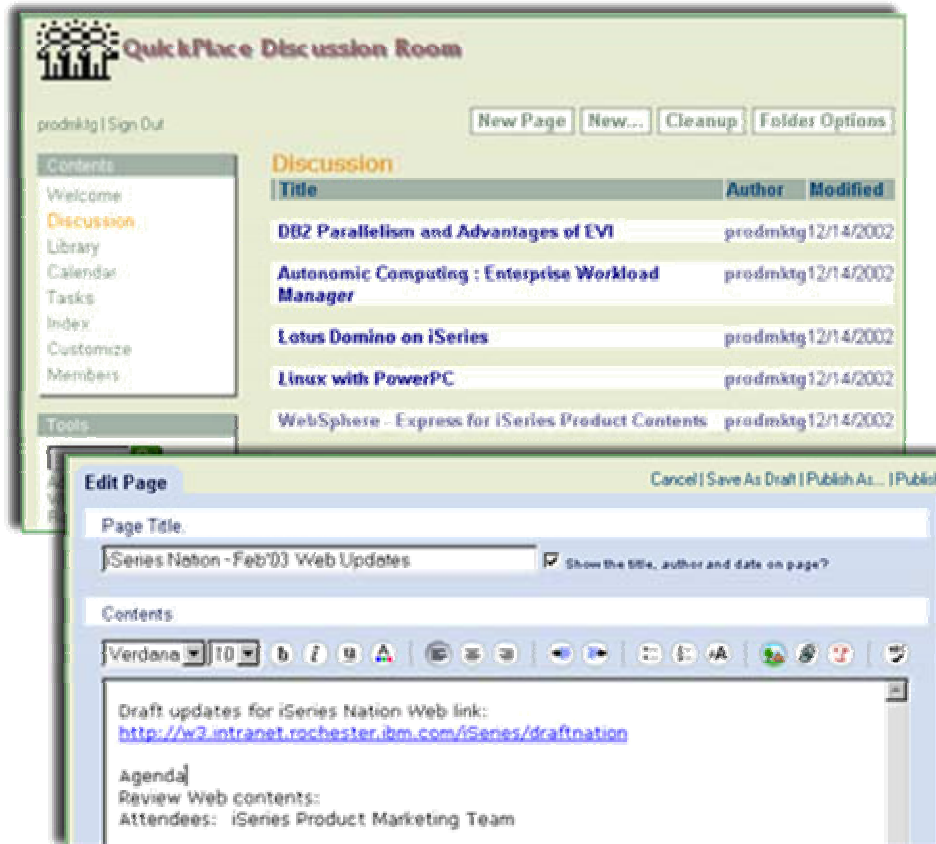
www.apria.com

Lotus software

DB2 Data Management Software

WebSphere software

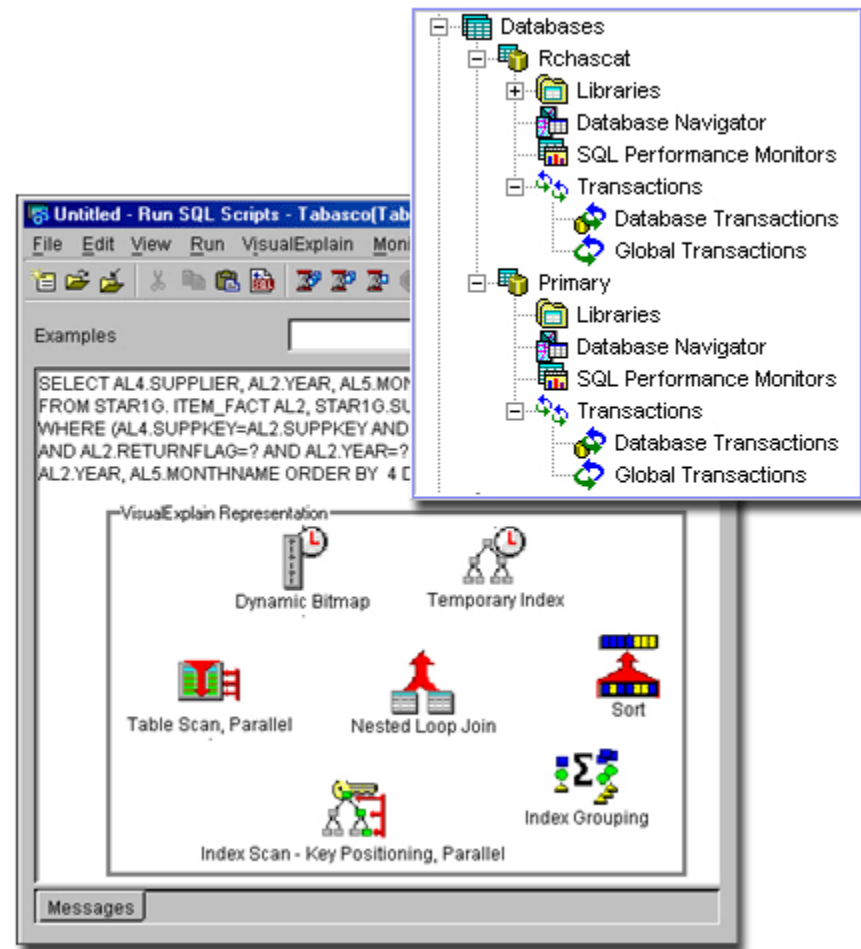
IBM Lotus QuickPlace™ & Sametime



- Get answers and make decisions faster with real time instant messaging
- Web-based team workspaces to store collective knowledge and manage projects
- Online Web conferences to share information with colleagues, suppliers and customers
- Awareness to quickly locate available skills and resources
- Integrated with Notes, Microsoft Outlook®, and WebSphere

DB2[®] UDB for iSeries

- Reduce DBA costs with extensive automation and integration of database
- Improve DBA productivity with self-optimizing queries, autonomic index advisor
- Exploit processor scalability with DB2 SMP parallelism
- Enable B2B data interchange through DB2 XML Extenders
- At the forefront of SQL and XML database open standards compliance



360 Group, USA

“The DB2 UDB on iSeries platform allows us to provide an extremely cost effective solution we wouldn't be able to offer on other platforms. Support, development and maintenance costs as well as our time to market would be double or triple what they are now if we had taken the Oracle route!”

Don Klabunde - Chief Technology Officer, 360 Group



www.360group.com

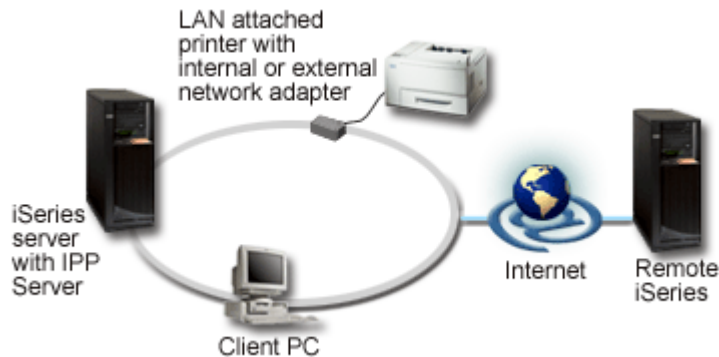
 **DB2** Data Management Software

iSeries Access for Web



- Simple, browser-based access to iSeries and Web applications
- Easy to configure, deploy and customize with central administration
- No complex browser JVM setup and 'no-touch' client footprint

Electronic Output and iSeries



- Expand output options beyond printing
- New PDF and e-mail capabilities with Infoprint Server for iSeries
- Transform Web images into iSeries output
- PDF output distribution integrated with V5R2 iSeries Access
- Enhanced graphical output design with Infoprint Designer for iSeries
- State-of-art high performance printers with powerful network printing options

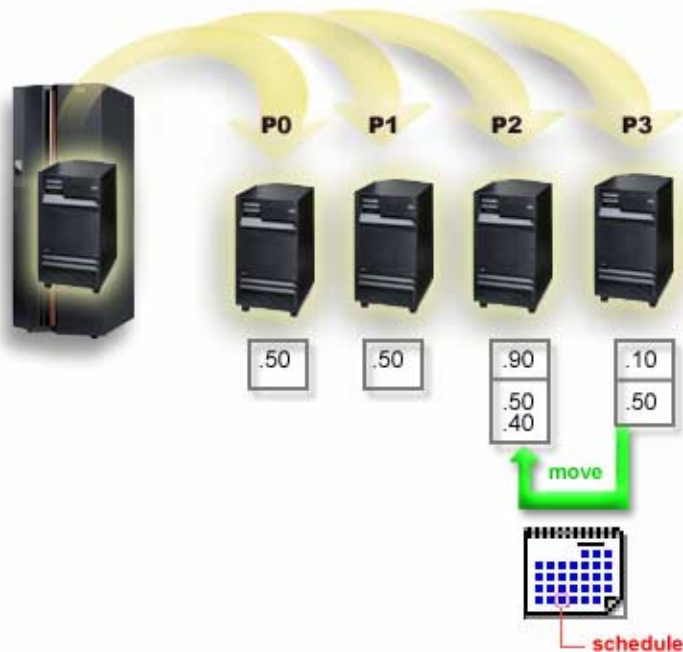
The Customer Challenge: Solving the Cost³ Equation

2) Cost of Ongoing Operations ...

Ongoing cost of skills to deploy and manage solutions



Optimize IT Resource Utilization with Logical Partitions



- Reduce costs via server consolidation
- Mainframe-class dynamic logical partitioning
- Market proven with over 10,000 active iSeries partitions in production
- Up to 32 OS/400® & Linux partitions
- Uni-processor partitioning
Up to 10 OS/400¹ or Linux LPARs per processor
- Windows-based graphical management & scheduling

¹ On i825, i870 and i890

Hosted Utility Services and ASPs

- IGS Virtual Server Services

IBM can rapidly provision and dynamically adjust a virtual server to meet the requirements of an on demand business

- Application Service Providers

Over 200 ASPs on iSeries, hosting over 2000 customers



AITANA SBS

“IBM eServers, IBM software and Linux make an ideal combination for our hosting infrastructure, which we depend on to run and manage our customers' mission-critical systems.”

José Carlos Ramos, e-business Manager, Aitana

DB2 Data Management Software

WebSphere software

Lotus software



www.aitanasbs.com

The Customer Challenge: Solving the Cost³ Equation

2) Cost of Ongoing Operations ...

Ongoing cost of skills to deploy and manage solutions



Apache Powered Web Serving

SPECwebSSL

	HTTP Server	Processor	Simultaneous Connections
IBM eServer iSeries 890	IBM HTTP Server (powered by Apache)	16-way POWER4	4,497*
HP Server rp8400	Zeus V4.1R3	16-way PA 8700	4,400
IBM eServer iSeries 890	IBM HTTP Server (powered by Apache)	16-way POWER4	3,600



SPECweb99

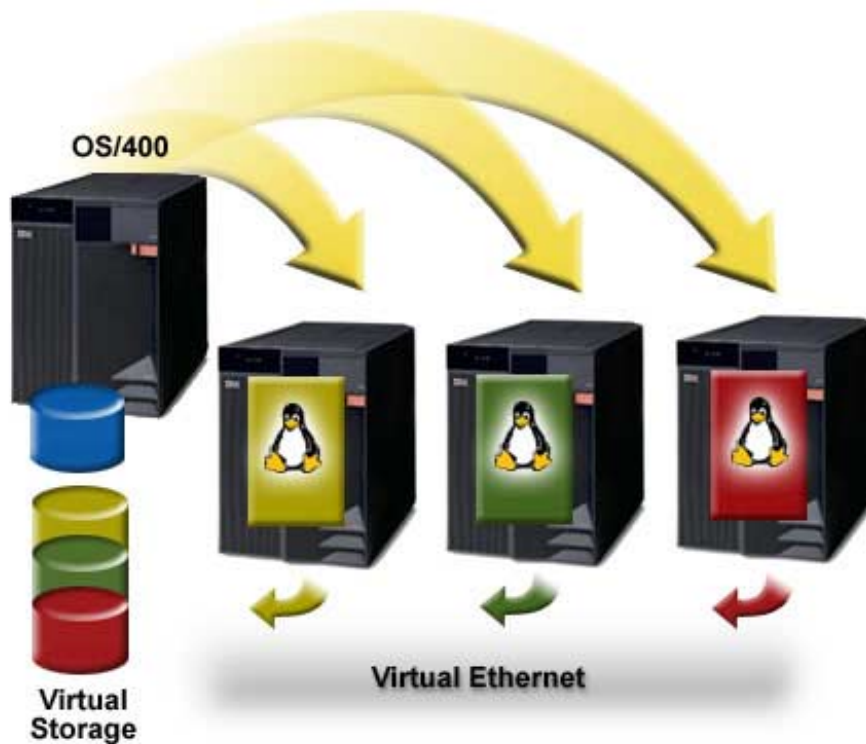
	HTTP Server	Processor	Simultaneous Connections
IBM eServer pSeries 690 HPC	Zeus 4.0	16-way POWER4	21,000
HP rp8400	Zeus 3.4r3	16-way PA 8700	15,000
IBM eServer iSeries 890	IBM HTTP Server (powered by Apache)	16-way POWER4	12,900

- Delivering industry-leading Apache based Web serving performance
- 64% of production Web sites based on Apache, <2% based on Zeus*

*Note: Results posted in January 2003 <http://www.ideasinternational.com>

*Source: NetCraft Web Survey November 2002

Exploiting Open Standards with Linux



- Extending award-winning iSeries Linux capabilities
- 64-bit scalability with United Linux (SuSE & Turbolinux) and Red Hat
- Consolidate with up to 10 Linux instances per processor
- i870 and i890 offer one no charge Linux processor activation²
- Flexible growth & management with dynamic virtual storage
- IBM DB2 & WebSphere (SOD)²

¹ Statement of Direction: This presentation contains IBM plans and directions. Such plans are subject to change without notice.

² Available on i870 or i890 with Enterprise Edition

Banco do Brasil

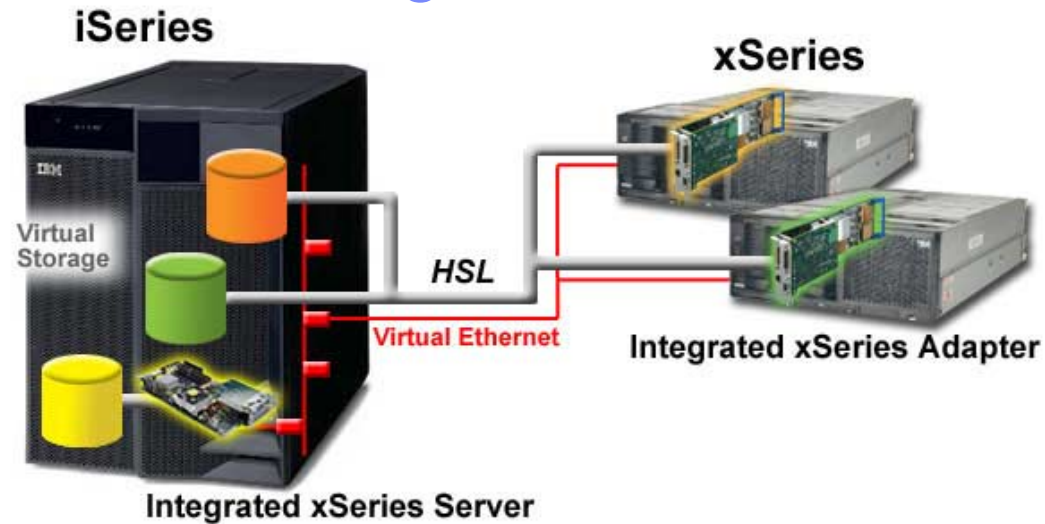
“Consolidating our European systems onto iSeries and xSeries will bring significant cost savings and improved administration. With Linux and iSeries, we will have a totally flexible and reliable infrastructure on which to move the business forward.”

Tim Evans, IT Manager - Banco do Brasil.

www.bb.com.br



Windows Server Management



- Lower cost of storage management and user administration
- Flexible Windows images simplify server test and deployment
- Integrated xSeries™ Server with 1.6 GHz Intel® Xeon processor
- Integrated xSeries Adapter supports xSeries x235, x255, x360, x440
- Support for Microsoft .NET¹

¹ Product Preview: This presentation contains IBM plans and directions. Such plans are subject to change without notice.

Huhtamaki

“Before consolidating on the iSeries and xSeries we required at least three dedicated administrators to run our servers...now because of its ease of use, we need only two administrators to run the new system.”

Brendan Carlton – Systems Administrator, Huhtamaki



www.huhtamaki.com



Integrated IBM Education and Services

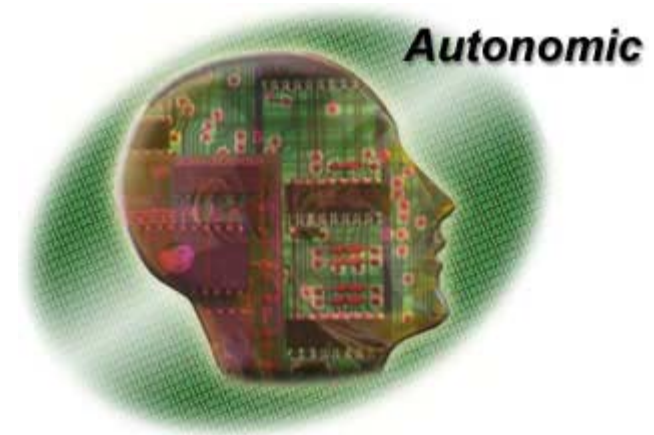
- Accelerate deployment of WebSphere, Linux and Windows integration
- Included with i825, i870 and i890 Enterprise Edition
- Offers one Getting Started service for WebSphere, Linux or Windows Integration
- IBM Learning Services education credits
 - 1 for i825, 3 for i870 and 5 for i890

	Solution	Education	Services
WebSphere			
Linux			
Windows Integration			

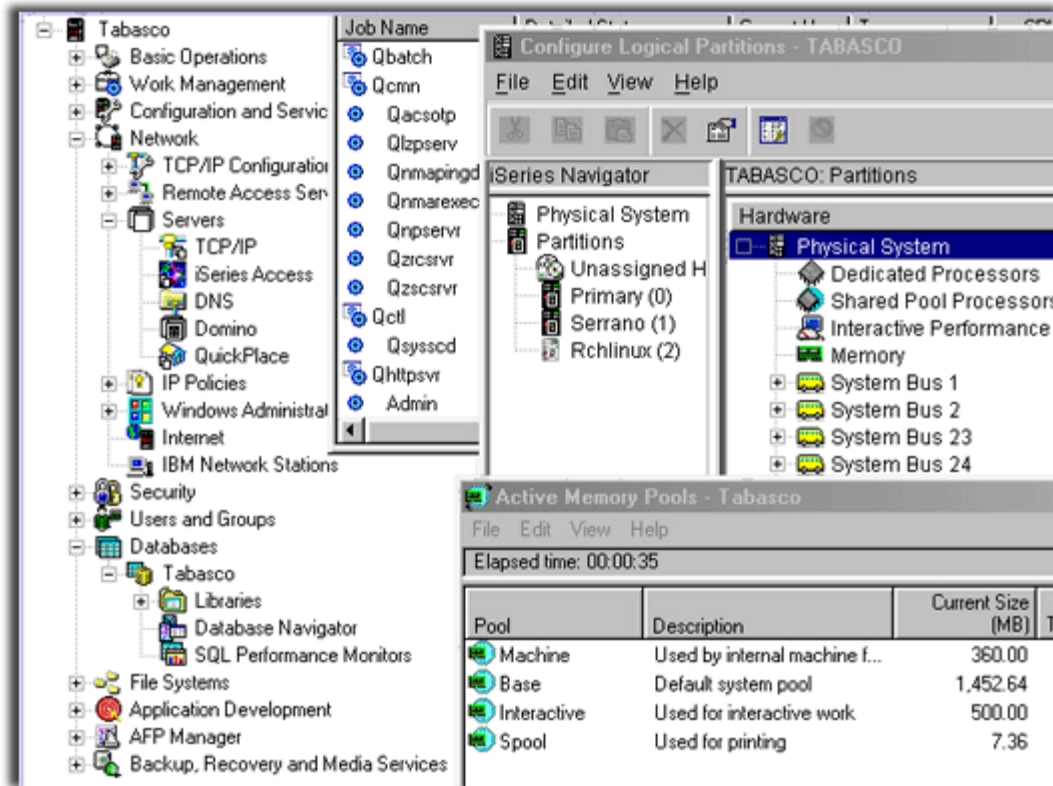
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2) Cost of Ongoing Operations ...

Ongoing cost of skills to deploy and manage solutions

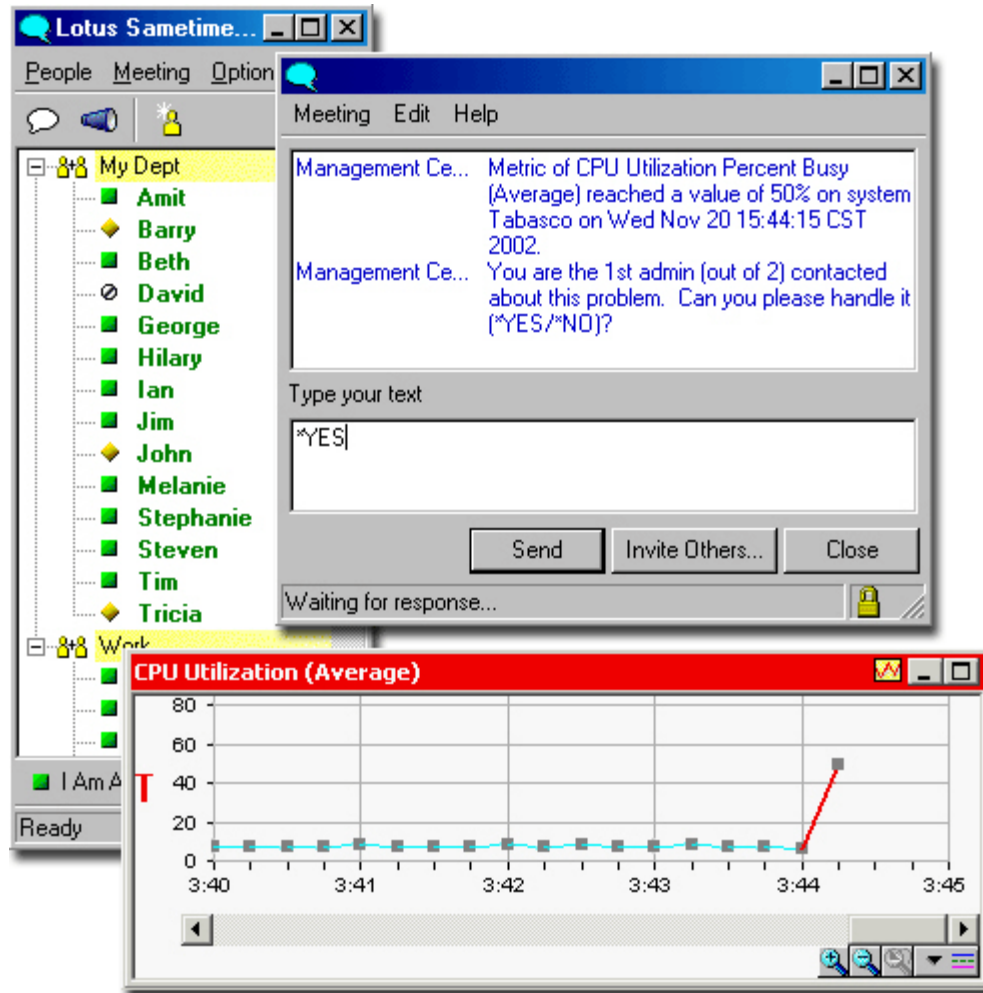


OS/400 V5R2 and iSeries Navigator



- Improve operator productivity with extensive automation for workload management
- Centralized administration of multiple operating environments across LPARs and Integrated xSeries servers
- Integrated management for enterprise middleware solutions

Lotus Sametime & iSeries Navigator



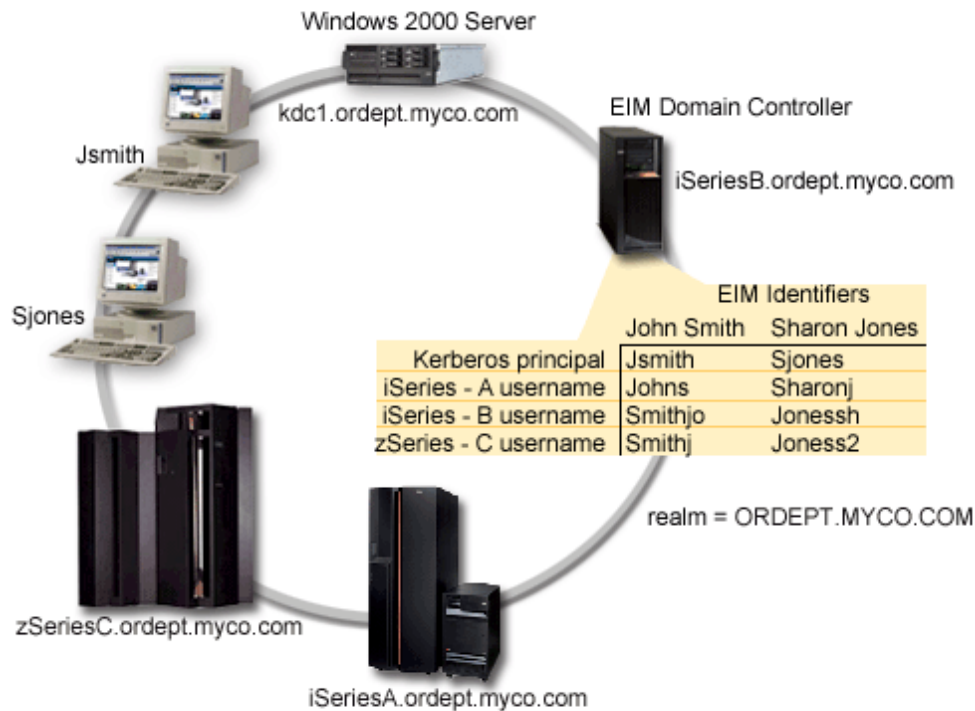
- Improves operator productivity with instant message response to system events
- Integrates OS/400 monitoring with Sametime instant messaging
- Assures response with automatic event delegation through hierarchy of designated operators

IBM Tivoli® Storage Manager Enterprise Edition



- Delivers integrated data protection for client backup and archive
- Centralized management, comprehensive policy based automation
- Complements Backup Recovery and Media Services for iSeries

Enterprise Security



- Improve user productivity with single signon via Enterprise Identity Mapping
- Reduce security risks with iSeries’s virus resistant object-based architecture
- Exploit the power of industry standards such as LDAP, SSL, VPN, Kerberos
- Lowers cost of security administration with integrated user management between Windows and iSeries

The Customer Challenge: Solving the Cost³ Equation

3) Cost of Technology Transition ...

Long term application & platform investment costs



... **Convergence
Strategy**

iSeries Strategy

“People come up to me and say ‘iSeries is an AS/400 with a new name.’ And I say, ‘you’re wrong, absolutely wrong.’



We’ve had people put together lists of new features and say you get all these on iSeries, and none of them on AS/400, and that’s the difference.

But to me, that’s not the difference.

To me, the difference is really the mission, the direction, the strategy.”

Frank Soltis, iSeries Chief Scientist

Speaking at COMMON Denver 2002

iSeries and pSeries Convergence



eServer On Demand Management Environment

- Convergence based on proven, scalable 64-bit POWER processors
- Runs today's OS/400 apps
- Runs today's Linux apps
- Runs today's Windows IA32 apps and ready for .NET
- Will run AIX in 2004*
- Seamless application and hardware upgrade from today's iSeries servers



*Statement of Direction: IBM plans to support AIX in a logical partition in the future.

This presentation contains information about IBM's plans and directions. Such plans are subject to change without notice.

Summary

Announcement Highlights

e-business on demand

The Customer Challenge: Solving the Cost³ Equation

Summary

iSeries 2003 Announcement Highlights

iSeries	<ul style="list-style-type: none">▪ An on demand operating environment for e-business
New servers	<ul style="list-style-type: none">▪ New iSeries servers deliver up to 80% price performance<ul style="list-style-type: none">– New Small to Medium Enterprise servers: i810 and iSeries 800▪ New POWER4-based servers for medium to large enterprises<ul style="list-style-type: none">– i825, i870, i890 (feature On / Off Capacity on Demand)▪ New high performance PCI-X I/O
New packaging	<ul style="list-style-type: none">▪ Dramatically simplified product choice with Standard and Enterprise Editions<ul style="list-style-type: none">– Unrestricted interactive 5250 CPW with Enterprise Edition▪ Designed for the exploitation of multiple e-business workloads▪ Enhanced integration with WebSphere[®], Lotus[®], Linux[™] & Windows[™]▪ Simplified software pricing tiers
New capabilities	<ul style="list-style-type: none">▪ On/Off Capacity on Demand▪ WebSphere Application Server - Express for iSeries▪ WebFaced applications run without interactive 5250 CPW

The next generation iSeries...



...simplicity in an on demand world

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AIX/L (logo)	DB2	e-business (logo)	iSeries	pSeries	Tivoli
AIX 5L	DB2 Extenders	e-business Hosting	Magstar	Redbooks	VisualAge
Application System/400	DB2 OLAP Server	e-business on demand	MQSeries	SecureWay	WebSphere
AS/400	DB2 Universal Database	FlashCopy	Operating System/400	SmoothStart	X-Architecture
AS/400e	DRDA	IBM	OS/400	SQL/400	xSeries
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